

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-054534

(43)Date of publication of application : 25.02.1994

(51)Int.Cl.

H02M 3/338

(21)Application number : 04-218401

(71)Applicant : MURATA MFG CO LTD

(22)Date of filing : 24.07.1992

(72)Inventor : WATABE SOICHI
TAKEMURA HIROSHI

(54) SWITCHING REGULATOR

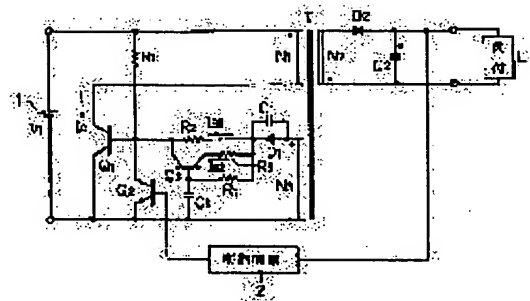
(57)Abstract:

PURPOSE: To improve an efficiency by a method wherein the base current of a switching transistor is reduced when a load is light or when an input voltage is elevated.

CONSTITUTION: When a load is heavy or when an input voltage is low, the ON-period of a switching transistor Q1 is prolonged. After a required lapse of time, a transistor Q3 is turned on by the rise of the charge voltage of a capacitor C1. Therefore, the summation of a base current IB2 through a second base resistance R3 and a base current IB1 through a base resistance R2 is supplied to the base of the switching transistor Q1.

When the load is light or when the input voltage is high, the ON-period of the switching transistor Q1 is shortened. In this state, a period while the transistor Q3 is turned on by the charge of the capacitor C1 is shorter than the ON-period of the switching transistor Q1.

Therefore, the transistor Q3 is not turned on and only the base current IB1 through the base resistance R2 is supplied.



LEGAL STATUS

[Date of request for examination] 15.04.1999

[Date of sending the examiner's decision of rejection] 23.10.2001

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] 3433429

[Date of registration] 30.05.2003

[Number of appeal against examiner's decision of rejection] 2001-20678

[Date of requesting appeal against examiner's] 19.11.2001

decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office